

AMENDMENT TO THE CLAIMS

1 (Currently Amended): A cutting head assembly for a food slicing machine comprising;

a generally circular cutting head for slicing a food product and carrying a plurality of circumferentially spaced cutting blades mounted thereon;

a rotary impeller arranged within the cutting head and to be driven in an intended driving direction of rotation about an axis of rotation located concentrically within the cutting head, the impeller having a plurality of impeller blades arranged for rotation in close approximation to the cutting blades of the cutting head;

a support ring comprising a ring portion having upper and lower surfaces and a plurality of circumferentially spaced flange segments projecting radially from the ring portion, each of said flange segments having a top surface, and including a radially and axially extending first flange surface oriented to extend at an angle relative to the axis of the support ring in an inclined direction from a forward radial edge adjacent the lower surface of the support ring directed upwardly to a rearward radial edge adjacent the upper surface of the support ring on an end of the flange segment generally opposed to a driving direction of rotation of an impeller within the cutting head, the flange segments also defining a second flange surface located at an end opposite the first flange surface and extending generally parallel to the support ring axis; and

an annular mounting ring located coaxially for connection to a bottom portion of the cutting head, the mounting ring having upper and lower surfaces and a plurality

of circumferentially spaced protrusions extending axially therefrom, each of said protrusions provided with a first protrusion surface oriented to extend at an angle relative to the axis of the mounting ring within an inclined direction relative to a forward radial edge directed upwardly to a rearward radial edge adjacent the lower surface of the mounting ring on an end of the protrusion generally leading in a driven direction of rotation of ~~[[an]]~~ the impeller within the cutting head, the protrusions also defining a second protrusion surface located at an end opposite the first protrusion surface and extending generally parallel with the mounting ring axis;

wherein said protrusion surfaces of the mounting ring are ~~complementary~~ complementary shaped to the flange surfaces of the support ring, said mounting ring positionable on the support ring so that the lower surface of the mounting ring is directly adjacent and flush with the top surfaces of the flange segments and the first protrusion surfaces are mutually engageable face-to-face with the first flange surfaces such that the cutting head is rotationally locked with the support ring thereby permitting the impeller to be rotatable relative to the cutting head which remains generally stationary relative to the impeller.

2 (Previously Presented): The cutting head assembly according to claim 1, wherein the protrusion surfaces are configured diagonally opposite the flange surfaces when the lower surface of the mounting ring is disposed on the upper surface of the support ring and concentric therewith with the protrusions and flange segments interdigitated.

3 (Previously Presented): The ring assembly according to claim 1, wherein the support ring further includes an annular lip axially extending from the upper surface thereof having an inner circumference generally concentric with an inner peripheral circumference of the support ring and an outer circumference between the inner and outer peripheral circumferences of the support ring, an annular receiving area on the upper surface of the support ring radially extending from the outer circumference of the annular lip to the outer peripheral circumference of the support ring.

4 (Previously Presented): The ring assembly according to claim 3, wherein the mounting ring has an inner peripheral circumference sized to be received by the annular lip of the support ring and received by the annular receiving area of the support ring, the inner peripheral circumference of the mounting ring having a diameter substantially the same as the outer circumferential diameter of the annular lip.

5 (Previously Presented): The ring assembly according to claim 4, wherein the mounting ring has an outer circumference with a diameter substantially the same as the outer circumference of the support ring.

6 (Currently Amended): A ring assembly having an interlocking joint arrangement, comprising:

a support ring comprising a ring portion having upper and lower radial surfaces with a plurality of circumferentially spaced flange segments projecting radially therefrom, each of said flange segments having a top surface, and including an inclined surface oriented to extend at an angle inclined relative to the axis of the support ring; and

a mounting ring having upper and lower radial surfaces and a plurality of circumferentially spaced protrusions extending axially from the lower surface, each of said protrusions provided with an inclined surface oriented to extend at an angle inclined relative to the axis of the mounting ring, said inclined surfaces of the protrusions ~~complementary~~ complementary shaped to said inclined surfaces of the flange segments;

wherein the lower surface of the mounting ring is configured so as to be received by the upper surface of the support ring in a coaxial relationship with the support ring such that the lower radial surface of the mounting ring is directly adjacent and flush with the top surfaces of the flange segments and the flange segments are interlocked with the protrusions upon rotation of the mounting ring relative to the support ring in only one direction and the inclined surfaces of the protrusions mutually engage face-to-face with the inclined surfaces of the flange segments;

wherein the flange segments each define a lower radial surface generally parallel to the lower surface of the ring portion of the support ring, and the protrusions define a lower radial surface such that the flange segment lower radial surfaces are generally aligned with the protrusion lower radial surfaces when the mounting ring is engaged with the support ring.

7 (Original): The ring assembly according to claim 6, wherein the inclined surfaces of the protrusions are configured diagonally opposite the inclined surfaces of the flange segments when the lower surface of the mounting ring is received on the upper surface of the support ring and coaxial therewith.

8 (Original): The ring assembly according to claim 6, wherein the inclined surfaces of the flange segments have a rearward edge generally adjacent to the upper surface of the support ring and an opposite forward edge generally adjacent the lower surface of the support ring and in a circumferentially spaced relationship relative to the rearward edge, the inclined surfaces of the protrusions having a rearward edge generally adjacent the lower surface of the mounting ring and defining a corner therewith and an opposite forward edge in a circumferentially spaced relationship relative to the rearward edge.

9 (Previously Presented): The ring assembly according to claim 6, wherein the support ring further includes an annular lip axially extending from the upper surface thereof having an inner circumference generally concentric with an inner peripheral circumference of the support ring and an outer circumference between the inner and outer peripheral circumferences of the support ring, an annular receiving

area on the upper surface of the support ring radially extending from the outer circumference of the annular lip to the outer peripheral circumference of the support ring.

10 (Previously Presented): The ring assembly according to claim 9, wherein the mounting ring has an inner peripheral circumference sized to be received by the annular lip of the support ring and received by the annular receiving area of the support ring, the inner circumference of the mounting ring having a diameter substantially the same as the outer circumference of the annular lip.

11 (Previously Presented): The ring assembly according to claim 10, wherein the mounting ring has an outer circumference with a diameter substantially the same as the outer peripheral circumference of the support ring.

12 (Canceled).

13 (Previously Presented): An interlocking joint arrangement for mounting a generally circular cutting head for slicing a food product on a slicing machine, the slicing machine including a rotary impeller arranged to be driven in an intended driving direction of rotation about an axis of rotation located concentrically within the cutting head when the cutting head is mounted on the slicing machine, the slicing machine including a support ring fixedly mounted thereto and the cutting head including an annular mounting ring coaxially connected to a bottom portion thereof, the joint arrangement comprising:

the support ring having a plurality of circumferentially spaced flange segments radially extending therefrom each having a top surface, and a first radially and axially

extending interlocking surface oriented at an incline relative to an axis of the support ring; and

the mounting ring having a lower surface and a plurality of circumferentially spaced protrusions axially extending therefrom, each having a radially and axially extending second interlocking surface oriented at an incline relative to an axis of the mounting ring;

wherein the lower surface of the mounting ring is directly adjacent and flush with the top surfaces of the flange segments and said first and second interlocking surfaces when interlocked and placed adjacent each other define an anti-rotation and hold-down coupling restraining the support and mounting rings against relative rotation about their axes and axially separating from each other, the support and mounting rings forming the coupling upon rotation of the mounting ring relative to the support ring in only one direction;

wherein the flange segments each define a lower radial surface, and the protrusions define a lower radial surface such that the flange segment lower radial surfaces are generally aligned with the protrusion lower radial surfaces when the support ring is coupled with the mounting ring.

14 (Previously Presented): The cutting head assembly according to claim 1, wherein the flange segments each define a lower radial surface generally parallel to the lower surface of the ring portion of the support ring, and the protrusions define a lower radial surface such that the flange segment lower radial surfaces are generally

aligned with the protrusion lower radial surfaces when the mounting ring is engaged with the support ring.

15 (Previously Presented): The cutting head assembly according to claim 1, wherein the support ring further comprises a hub and a plurality of spokes connecting the hub to the ring portion, the hub being offset relative to the ring portion along the support ring axis.

16 (Canceled).

17 (Canceled).